

PROCESSING AND PROPERTIES INDEX

CA

Silver bromide emulsion formulas for photographic papers. V. Ya. Mikhailov and P. I. Klyukova. *Khimofotokhimiya Prom.* 1930, No. 4, 38-40; *Phot. Abstracts* 10, 237; cf. C. A. 34, 1605. Preliminary expts. with emulsions in industrial use and in the literature showed that it was not possible by rigidly adhering to one of the formulas to obtain emulsions of the best quality, whereas a comparatively small change in the formula and routine permitted satisfactory results to be obtained. The basis of the expts. was an emulsion made as follows: (A) KBr 50^a and (B) AgNO₃ 10.86 g., made ammoniacal, plus H₂O up to 125 cc. at 18-20°. The whole was made up to 1 l., after emulsification and 37.25 g. of gelatin added. Soft, normal and contrasty emulsions were emulsified for 10 min., 3.5 min. and rapidly mixed, resp., stirred after emulsification at 50° (for ripening) for 5, 12, 15 and 3 min.; and ripened again for 2.5 hrs., 1 hr. and 45 min., resp. To 1 l. of emulsion were added 20 cc. of alc., 15 cc. of glycerol, 8 cc. of 10% soln. of alum and 60 cc. of 40% soln. of K citrate. Fifteen cc. of HCl (sp. gr. 1.2) was sometimes introduced to lower the light-sensitivity; it also improved the keeping properties. The formulas described can be used for all kinds of papers. The same gelatin can be used for soft and normal emulsions, but for contrasty emulsions should be specially selected. The method of speed and contrast detn. is described, and the speeds of the various grades are compared with similar speeds of Ilford paper. The emulsion was coated at a large grade of Ilford paper. The emulsion was coated at a coating wt. varying from 125 to 150 cc./sq. m. The quantity of Ag and its distribution in the emulsion layer are shown to influence the contrast. The addn. of alkalis NaHCO₃, Na₂CO₃ and NaHSO₄ caused a negligible decrease in d. Alk. carbonates increased the contrast by 30-40%, but NaHSO₄ had practically no effect. The light-sensitivity with KHCO₃ was increased by 10%. With K₂CO₃ by 60%; with phosphate it was lowered. The quality of the image was not improved. The length of the toe is shown to depend on the gelatin, and also on the ripening period, being lengthened with increased ripening time. KI when introduced (a) during or prior to the 2nd ripening, or (b) before coating, acts as an efficient desensitizer, especially in case a), decreasing the latent sensitivity, i.e., contrast and length of the toe, but it impairs the quality of the emulsion and increases the tendency to fog.

ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION

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100 AND 6TH CODES

PROCESSING AND PROPERTIES INDEX

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The history of gelatinobromide layers V. Ya. Mikhalov. *Akademiya. Prom.* 1930, No. 8, 3 K; *Akim. Refrat. Zhur.* 1930, No. 10, 121.—A historical review of the development of gelatin-AgBr photographic emulsions including the first years of this process, optical sensitization and the improvement of the emulsions is presented. Results of the newest investigations are given.
W. R. Henn

COMMON ELEMENT

CHEMICAL SYMBOLS INDEX

ASB-31A METALLURGICAL LITERATURE CLASSIFICATION

GROUP

SUBJECT

ILLUSTRATION

FORM NUMBER
SUBJECT ONE TWO

1ST AND 2ND COLUMNS										PROCESSES AND PROPERTIES INDEX										3RD AND 4TH COLUMNS										
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<p>The effect of mercury on sensitive emulsions. V. Ya. Mikhailov and A. N. Uspenski. <i>Kinofotokhim. Prom.</i> 6, No. 11/12, 20-23(1940).—Hyperenitization of emulsions and intensification of the latent image by Hg were investigated to det. optimal conditions for aerial panoramic and panchromatic films. Hyperenitization is less effective than intensification of the latent image at room temp. The optimal time of hyperenitization at this temp. is 70-100 hrs. Intensification of the latent image increased the sensitivity of panchromatic film about 2.5 times, and that of panchromatic film twice. The fog increased from 0.12 to 0.15, and from 0.18 to 0.19 for the films mentioned. At a temp. of 40°, the optimal time of treatment was reduced, although the max sensitivity did not exceed that obtained by hyperenitizing at a lower temp. The fog increase was higher at the high temp. The optimal time of hyperenitization with Hg varies according to the properties of the film and must be detd. for each individual case. By intensification of the latent image with Hg vapor in a humid atm. the sensitivity of the film could be increased 3.5-4.0 times but the fog increase was greater than in a dry atm.</p> <p align="right">W. R. Richter and W. J. Weyerts</p>																														
ASB-SLA METALLURGICAL LITERATURE CLASSIFICATION																														
SOURCE SYMBOLS										SUBJECT SYMBOLS										CROSS REFERENCE										
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MIKHAYLOV, V. Ya.

"Formulary For Field and Laboratory Photographic Jobs", Collection of papers
on Science, Technology and Practice." No. 15, Geodezizdat, M., 1944.

MIKHAYLOV, V.Ya.

Influence of Intensification and Reduction on the Quality of the Picture.
Sborn. nauch. tekhn. i proiz. Statey. No.15. Geodezizdat (1947)

MIKHAYLOV, V. Ya.

"The Effect of Papers on Science, Technology and Practice", No 15, Geodezizdat,
M., 1947.

MIKHAYLOV, V.Ya.

Regulations for Topographic Surveys on Scale 1:25000. Part II. Photographic Work. Geodezizdat, Moscow (1948)

MIKHAYLOV, V. YA.

Ob"ektivnaia otsenka kachestva aeronegativov. (Sbornik nauchno-tekhnicheskikh i proizvodstvennykh statei po geodezii, kartografii, topografii, aeros"emke i gravimetrii, 1949, v. 24, p. 59-63).

Title tr.: Objective evaluation of the quality of the aerial photographic negatives.

QB301.R8 1949

SO: Aeronautical Sciences and Aviation in the Soviet Union, Library of Congress, 1955.

MIKHAYLOV, V. Ya.

"Processing of Aerial Films. Transactions of the Central Scientific Research
Institute of Geodesy, Aerial Survey and Cartography", No. 79, Goedezizdat,
M., 1950.

MIKHAYLOV, V.Ye.

Basic Specifications for Aerial Photosurveys for Maps at Scales 1:2000 to
1:25,000. Izd. GUGK (1951)

MIKHAYLOV, V.Ye

Regualtions for Office Photogrammetric Work in Topographic Surveys at
Scales 1:5000 and 1:2000. Geodezizdat, Moscow (1952)

MIKHAYLOV, V. YA.

PHASE II

TREASURE ISLAND BIBLIOGRAPHICAL REPORT

AID 215 - II

BOOK

Author: MIKHAYLOV, V. YA., Dotsent

Call No.: AF582721

Full Title: PHOTOGRAPHY AND AERIAL PHOTOGRAPHY

Transliterated Title: Fotografiya i aerofotografiya

Publishing Data

Originating Agency: None

Publishing House: Publishing House of Geodetic and Cartographic Literature

Date: 1952

No. pp.: 372

No. of copies: 5,000

Editorial Staff

Editor: None

Editor-in-Chief: None

Tech. Ed.: None

Appraiser: None

Text Data

Coverage: In this textbook the principles of photography, sensito-
metry and aerial photography are outlined according to
lectures on aerial survey held in schools of higher
learning. Some chapters (Ch. V: Obtaining of Images in
Aerial Cameras and Ch. VIII: The Negative Process) are
treated in more detail than the others.
Preface: This is a short outline of a course in "Principles of
Photography and Aerial Photography" which the author read

Fotografiya i aerofotografiya

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in the Moscow Institute for Surveying. Chapter II was written by Sheberstov, V. I., Kand. of Techn. Sci., Chapter V by Istomin, G. A., Kand. of Techn. Sci. Besides, valuable assistance was given by: Chibisov, K. V., Corr. Member, Academy of Sciences, USSR, Gordon, G. G., Engineer and Markhilevich, K. I., Kand. of Tech. Sci.

Introduction: A short history of photography and aerial photography is presented and the names of leading Russian and Soviet scientists are given:

Maksimovich, S. O. (works on color photography, cinematography and sensitometry)

Burinskiy, Ye. F. (forensic photography - methods of obtaining photographic pictures from very faint objects)

Timiryazev, K. A. (application of photography to the study of nature)

Favorskiy, V. I. (new methods in intensification of images)

Shilov, N. A. and Katushev, Ya. M. (the chemistry of the process of development and the characteristics of some of the developer ingredients)

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Fotografiya i aerofotografiya

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In the last decade the physical and chemical sides of the photographic process were investigated by: Chibisov, K. V., Kravets, T. P., Rabinovich, A. I., Katushev, Ya. M., Fayerman, G. P., Gorokhovskiy, Yu. N., Lyalikov, K. S., Savostyanov, M. V., Meyklyar, P. V., Titov, A. A., Sheberstov, V. I. and others.

Drobyshev, F. V. constructed an original nine-lens (with a 140° angle) aerial camera. In 1919 the High Geodetic Administration was created; later the High Aerial-Photogrammetrical School of the Air Forces was established. In 1924 was organized the Aerial Photography Section of the All-Union Voluntary Society of the Air Force "Dobrolet". The central institution having the task of supervising aerial surveying is the Main Geodetic and Cartographic Administration at the Council of Ministers, USSR.

The Soviet photographic industry has grown in the field of light-sensitive materials as well as in the production of lenses and cameras. The more prominent lenses are: the wide-angle lens "Russar 29" (Rusinov, M. M.) with good, even marginal illumination;

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Fotografiya i aerofotografiya

AID 215 - II

the still wider angle lens "Rodina" (Rodin, V. S.); the high power lens with large field of view "Uran" (Volosov, D. S.); and the mirror-meniscus lens made by Maksutov, D. D. At the present time photographic equipment is manufactured by a number of factories.

Abstract: The detailed Table of Contents gives a good outline of the scope of the book. Some additional information concerning names of Soviet workers and indicating the specific field of their research and activities is given in the Introduction. The book is supplied with 46 tables and 200 photos and graphs.

Evaluation: The book brings a general outline of the theoretical side of photographic processes but seems to contain little details and practical data, especially concerning new or original processes and equipment. Russian made cameras and lenses are only briefly outlined. They appear to be very similar in design to those known in this country, of our own or German production.

Purpose: Approved by the Ministry of Higher Education as a textbook for the special course in "Aerial Photo-Geodesy" in schools of higher learning.

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MIKHAYLOV, V.Ya.; MARKHILVICH, K.I., red.; VOROB'YENVA, L.M., red., izd-vo;
~~SHENSKII, I.A., tekhn. red.~~

[Manual of photographic laboratory procedures] Rukovodstvo oo
fotolaboratornym rabotam. Moskva, Izd-vo geodez. lit-ry, 1954.
222 p. (MIRA 11:5)

(Photography--Handbooks, manuals, etc.)

MIKHAYLOV, V. Ya. and DMITRIY, V. K.

"Deformation of Photofilms", Sb. ref. Tsentr. n-i. in-ta geod., aeros'-
yenki i kartogr., No 2, pp 52-55, 1954.

Most convenient photofilms for photogrammetry were those on special base, and particularly hydrotype films. To avoid deformations of stored negatives, prints should be prepared on paper with aluminum base. (RZhAstr, No. 11, 1955)

SO: Sum No 812, 6 Feb 1956

MIKHAYLOV, V.Ya.

Sensitometric control of photographic images in field conditions.
Usp.nauch.fot.no.4:61-66 '55. (MLRA 9:4)
(Photography, Aerial) (Densitometers)

MIKHAY LOV, V. YA.

USSR/Chemical Technology - Chemical Products and Their Application. Photographic Materials, I-19

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63027

Author: Mikhaylov, V. Ya.

Institution: None

Title: Some Specific Features of the Processing of Black-and-White Aerial Photography Films

Original

Periodical: Uspekhi nauch. fotografii, 1955, 4, 232-240

Abstract: For development of overexposed aerial photography films is recommended the use of benzotriazole (B) which strongly retards the development process. Characteristic curve of blackening of the layer rapidly reaches the limiting value γ and on prolongation of development extends in parallel direction; light sensitivity (S_d) is considerably decreased. Density of fog (D_0) decreases with increased concentration of B, the characteristic curve is shifted toward larger exposures retaining the maximum value γ which is attained with 0.3-0.5 g

Card 1/2

USSR/Chemical Technology - Chemical Products and Their Application. Photographic Materials, I-19

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63027

Abstract: B per one liter of developer. On development with B development defects on film winding apparatus are leveled off; uniformity of development is achieved as well as absence of streaks and much better contrasts are produced. Even more effective is phenyl mercaptotetrazole, but the use of this substance is less convenient under field conditions since it requires exact dosing. There is shown the dissimilar effect of B on differently exposed silver halide crystals of photographic layer: B inhibits more strongly development of weakly exposed grain. An explanation is provided of the action of B: this effect is associated with adsorption at AgBr which occurs only in alkaline medium (in acid developers the effect of B was not observed); B is an electron acceptor and decreases the number of electrons that reach the surface of AgBr crystals. For development of underexposed aerial photography films it is recommended to use hydrazine which increases S_d ; to decrease D_0 a combined use of hydrazine and B. Investigated was the action of B and hydrazine on photographic materials of different sensitivity and structure.

Card 2/2

MIKHAYLOV, V.Ya.; TSYGANOV, M.N.

Color photographic process in aerial photography. Trudy TSNIGAIK
no.107:5-48 '55. (MLRA 9:6)

(Color photography) (Photography, Aerial)

MIKHAYLOV, V.Ya.

Results of using the color photographic process for aerial photography and cartography. Trudy TSNII GAIK no.107:55-77 '55.

(MLRA 9:6)

(Color photography) (Photography, Aerial) (Cartography)

MIKHAYLOV, V.Ya.

Some materials substantially affecting the quality of photographic
images. Trudy TSNIIGAIK no.107:79-94 '55. (MLRA 9:6)
(Photography--Apparatus and supplies)

M. Khaylov, V. Ya.

26 20
Developing colored aerial photographs under field conditions. V. Ya. Mikhalev and M. N. Vyganov. U.S.S.R. 103,268, Mar. 28, 1966. After exposure the films are treated for a short time with a Na_2SO_3 soln. and then with a soln. of K Cr albu and finished in the usual manner.

M. Hoach

WR

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K-11

Category : USSR/Optics - Scientific photography

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2661

Author : Mikhaylov, V.Ya.

Inst : Scientific Res. Inst. of Geodesy, Aerial Photography, and Cartography,
Academy of Sciences USSR

Title : Effects of Development Conditions on the Light Sensitivity and Balance of a
Negative Color Film

Orig Pub : Zh. nauch. i prikl. fotografii i kinematogr., 1956, 1, No 1, 29-38

Abstract : The effect of development conditions on certain properties of color-photography materials was investigated. The addition of benzotriazole (3 mg/l) to the developer reduces the fog considerably, and the related reduction in light sensitivity S can be compensated by prolonging the development time, with the γ increasing simultaneously. A considerable increase in S (by approximately twice) with simultaneous increase in γ by 50% was obtained by adding TINO₂ to the developer (0.5-1 g/l) or to the preliminary bath (10 g/l); the balance with respect to S is hardly affected by this, but the balance with respect to γ is somewhat poorer. A still greater increase in S (to 10 times) is possible by combining black-and-white development (in the initial stage) with color development to increase the yield of Ag. Such a method disturbs the color reproduction, since it disturbs the balance with

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Category : USSR/Optics - Scientific photography

K-11

Abs Jour : Ref Zhur - Fizika, No 1, 1957 No 2661

respect to S (owing to the small change in S of the purple layer) but can be used where color separation alone is needed. Good results in the improvement of the color balance are obtained by selective reduction of S and γ of the upper (yellow) layer by processing with an alcohol solution of iodine.

Card : 2/2

MIKHAYLOV, V. YA.

USSR/Chemical Technology - Chemical Products and Their Application. Photographic Materials, I-19

Abst Journal: Referat Zhur - Khimiya, No 19, 1956, 63031

Author: Mikhaylov, V. Ya.

Institution: None

Title: On Improved Readability of Color Photographs

Original

Periodical: Zh. nauch. i prikl. fotografii i kinematogr., 1956, 1, No 1, 70

Abstract: Improved readability of aerial color photographs is attained by the use of 2-layer spectrozonal films the top layer of which is light sensitive to infrared radiation, and the bottom layer to light of the visible region of the spectrum. Photographs recorded on this film reveal much better various details of the photographed objects especially on photographs of forests, fields and ground cover.

Card 1/1

MIKHAYLOV, V.Ya.

Answers to readers' letters. Zhur.nauch. i prikl.fot.i kin.1
no.3:240 My-Je '56. (MIRA 9:9)
(Photography--Printing processes)

MIKHAYLOV, V. Ya.

Practical variation in the color photographic process. Zhur.nauch.1
prikl.fot.1 kin. 1 no.5:383-385 8-0 '56. (MLRA 9:11)
(Color photography)

MIKHAYLOV, V. Ya.

Acceleration of color-development process. V. Ya. Mikhaylov. *Zhur. Nauch. i Priklad. Fot. i Kineematografi* 1, 408-9 (1966).—A faster method of color development is described: first develop in the following bath for 5 min.: Metol 2, hydroquinone 5, anhyd. Na_2SO_3 20, K_2CO_3 75, KBr 1 g., and H_2O to 1000 ml., add 5 ml. of 20% Na thio-sulfate, and continue the development for 8 min. Wash for 1 min. in 1% AcOH or 1% chrome alum. Next expose to a 300-w. bulb for 3 min., using a black background. Next develop in the following bath for 11 min.: ethyl-(hydroxyethyl)-p-phenylenediamine 4, anhyd. Na_2SO_3 2, anhyd. NaHCO_3 40, KBr 0.2 g., benzotriazole 9 mg., and H_2O to 100 ml., followed by a stop-bath of 0.5% AcOH for 2 min. The film is next fixed for 5 min., bleached for 5 min., and washed for 10-20 min. ... V. S. Mikhaylov.

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MIKHAYLOV, V.Ye. kandidat tekhnicheskikh nauk.

Using soft masks for photographic printing. Geod. i kart. no.1:27-32
Ja '57. (MIRA 10:3)

(Photography--Printing processes)

MIKHAYLOV, V. Ya.

"Modern applied photography" by G.A. Jones. Reviewed by
V.IA. Mikhailov. Zhur.nauch.i prikl.fot.i kin. 2 no.4:318-319
J1-Ag '57. (MIRA 10:7)

(Photography)

MIKHAYLOV, V.Ya., kandidat tekhnicheskikh nauk.

Some data on the study of deformation in aerial photographic plates.
Geod. i kart. no.6:43-46 Je '57. (MLRA 10:3)
(Aerial photogrammetry)

MIKHAYLOV, V. YA

IVANOV, A. I.

AUTHOR:

TITLE:

PERIODICAL:

ABSTRACT:

Card 1/3

Bol'shakov, V. B., Candidate of Technical Sciences
Sovetskoye Tekhnicheskoye Nauchnoye Ispytaniye

Scientific and Technical Conference of MIRA I K (Machino-
tekhnicheskaya konferentsiya MIRA I K) I.

Izvestiya Vysshaya shkola tekhnicheskogo nauchnogo
sotrudnichestva, 1958, No 2, pp 111-114 (USSR)

From April 24 to 26 a scientific and technical conference of the MIRA I K (Institute of Geodesy, Aerophotography, and Cartography, Moscow) was held in Moscow. Furthermore, there were four sessions in operation on geodesy, aerophotogeodesy, cartography, and on the production of photogrammetrical instruments. More than 500 delegates from 45 institutes took part in the conference at which 28 lectures were given. 20 delegates participated in the discussions. The opening speech was made by the Director of the MIRA I K, Professor P. S. Zakharov, Doctor of Technical Sciences. The first paper read was that by A. I. Ivanov, Senior Research Engineer, on "The Setup and the Levelling Principles of Geodesic Basic Network of the USSR." A. M. Kirovskiy, Professor, read a paper on "The Application of Spherical Coordinates in the Levelling of Geodesic Networks on the Basis of the Data of the Levelling of Geodesic Networks." M. S. Murav'yev, Doctor, read a paper on "The Special Stability." V. G. Solov'yov, Doctor, read a paper on "Technical Sciences: The Life and Scientific Work of A. P. Bolotov." V. B. Bol'shakov, "Optical Measurements of Distances Under Precise Conditions." E. V. Ipatov, Assistant, "On the Methodology of High-Precision Goniometry in First-Class Triangulations I." E. Ya. Bobir, "On the Problem of Determining Some Elements of Inner Orientation of Side-Angle and Super-Side Angle Aerial Camera." A. E. Ignatov, Graduate Student, "On a Level Device with a Freely Suspended Reflector." A. S. Blazhukov, reported on "Geodesy and Cartography at the Beginning of the Soviet Rule." Ye. P. Arbanov on "An Investigation of the Self-Adjusting Device with Supporting Rollers." L. N. Vasil'yev, Graduate Student, "Stereo-comparator with Electrical Corrections." V. B. Bol'shakov, Doctor, Candidate of Technical Sciences, "On the Theory of the Stereoscopic Image in the Stereoscopic Image." P. V. Zolotarev, "On the Distinctive Capabilities of Black-and-White and Color Photography." Ye. M. Kuznetsov, Graduate Student, "The Elements of Theory of a New High-Speed Shutter." I. G. Skripin, Professor, "The Present State of Physical-Mathematical Knowledge on the Precise Production of Measuring Tools." S. M. Golovinskiy, "Speeding up and Improving the Production of Measuring Tools." L. A. Malkin, Doctor, Candidate of Technical Sciences, "On Instruments for the Precise Measurement of Distances." V. S. Mikhaylov, Assistant, "Field Tests with the Optical Range Finder CHB-1." V. S. Usov, Assistant, "On the Study of Inaccuracies in the Measuring Devices of Telescopes." E. M. Volkov, Professor, Doctor of Geographical Sciences, "Some Remarks on Engraving in the Production Process of Original Maps."

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Card 3/3

AUTHOR: Mikhaylov, V.Ya.

SOV-77-3-5-15/21

TITLE: The Rational Use of Color Negative Film LN-3 (O ratsional -
nem ispol'zovanii tsvetnoy negativnoy plenki LN-3)

PERIODICAL: Zhurnal nauchnoy i prikladnoy fotografii i kinematografii,
1958, Vol 3, Nr 5, pp 384-385 (USSR)

ABSTRACT: The LN-3 color film was intended for artificial lighting by
incandescent lamps whose emission of blue rays is small.
The top layer of the film is therefore made more sensitive
to blue light than that of the corresponding film for day-
light (DS). When used in daylight the LN-3 film may be
used with a yellow filter to cut out some of the blue com-
ponent of daylight. This lowers the sensitivity of the film
and a better method is to shoot without a filter and add
iodine solution to the developer in the proportions 0.06-
0.08 g/l. A well balanced image can thus obtained. The
LN-3 can then be used as a universal film: for low temper-
ature light sources it is developed without iodine, for day-
light, with it. For distance photography, a yellow filter
should be used and the film should be developed without io-
dine. There are 4 graphs and 2 Soviet references.

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The Rational Use of Color Negative Film LN-3

SOV-77-3-5-15/21

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aerofotogrammetrii i kartografii (Central Research Institute for Geodesy, Aerial Survey and Cartography)

SUBMITTED: June 16, 1958

1. Photography 2. Color film--Applications 3. Photographic filters--Applications

Card 2/2

AUTHOR: Mikhaylov, V.Ya., Candidate of Technical Sciences 6-58-4-5/18

TITLE: The Chemical Basis of Modern Aerial Photography (Khimicheskaya baza sovremennoy aerofotografii)

PERIODICAL: Geodeziya i Kartografiya, 1958, Nr 4, pp. 29-36 (USSR)

ABSTRACT: A survey is given of the present stage of aerial photography, particularly in foreign countries. It is pointed out that it was found both in the USSR and in other countries that, for the transmission of fine details, the amount of the resolving power R is of great importance. - It is further pointed out that in modern aerial photography there is a tendency to use films of lower sensitivity but higher resolving power. High resolving power is, however, not sufficient, and sharpness of contours must by all means be warranted. Soviet films have a greater resolving power (films of the type 10 and 11) than Gevaert films, and their photosensitivity is 1 : 2. In connection with the investigation of chromatic sensitivity the creation of a combined film is demanded, which is to combine panchromatic or isochromatic and infrachromatic sensitivity, which, in view of the present advanced stage of the technique of producing emulsions, is easily possible. With respect to materials

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The Chemical Basis of Modern Aerial Photography

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for colored photos the opinion is expressed that also in the future, spectrozonal films will hold their own, because aerial photographs in natural colors are in most cases less expressive and can therefore not be utilized sufficiently well. In the chapter dealing with the treatment of the exposed films the great progress made with respect to the increase of the photosensitivity of films and acceleration of treatment is pointed out. For the purpose of speeding up work, two additional methods are at present being employed besides those already known: 1.) By using a viscous paste, 2.) By diffusion. The latter method is at present being used for special packages for the photographic camera "Moment". Its applicability for aerial photographs is now being tested. There are 3 figures, 3 tables, and 10 references, 6 of which are Soviet.

AVAILABLE: Library of Congress

1. Aerial photography 2. Films--Photosensitivity 3. Films
--Exposure

Card 2/2

AUTHOR: Mikhaylov, V. Ya., Candidate of Technical Sciences SOV/6-58-6-7/21

TITLE: On the Enlargement of Aerial Photographs (Ob uvelichenii aerosnimkov)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 30-37 (USSR)

ABSTRACT: The problem of the possible degree of enlargement is examined from the viewpoint of modern conceptions. Effects leading to an impairing of the accuracy of measurements in visual and photographic enlargement are investigated. According to GOST-2653-44 the difference of the optical density of two neighboring elements of a photographic representation is measured by the density graduation δ : $D_1 - D_2 = \delta$ (which should not be confused with the densities range in the negative ΔD , where $\Delta D = D_{\max} - D_{\min}$). A detail in a picture can only be distinguished, when δ exceeds a certain liminary value ϵ . The smaller ϵ , the smaller will be the δ necessary for the determination of the detail. ϵ is influenced by the illumination of the observed object, the angular size of the object, its contour distinctness and the duration of observation. The first and the last of these factors can always be chosen in a favor-

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On the Enlargement of Aerial Photographs

SOV/6-58-6-7/21

able manner. The two other factors are investigated. The greater the angular size of the object, the more easily can the object be distinguished. As the pictures are ordinarily observed at a distance of about 25 cm (corresponding to normal vision), an enlargement will reduce it. That is the reason for the fact that the objects are more easily **distinguishable** in an enlargement. In order to provide a conception of the influence of indistinct contours on visual perception, an experiment is described. In photographic enlargement circumstances are more complicated as compared to visual enlargement, as all defects are correspondingly increased. Above all, the distinctness of the contours is reduced, which in photography is characterized by the limit curve. It is shown, how such a curve is plotted with the help of the microphotometer. The shape of the limit curve depends on a number of factors. When development is protracted, crystal grains are produced. The distinctness of details is influenced by the emulsion thickness. V. A. Faas pointed to the great influence of the angle of incidence of the rays entering the lens. The suitability for measurements at great enlargement is limited by the grain. From the viewpoint of admissible grain a five-fold enlargement

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On the Enlargement of Aerial Photographs

SOV/6-58-6-7/21

of black-and-white film and a 16-to 20-fold enlargement of color films is possible. The shape of the limit curve and the grain of the film exert a great influence on the resolution. These three factors (shape of limit curve, grain and resolution) are of basic importance for terrestrial and aerial photography. The formula by O. A. Gerasimova (Ref 7) for the determination of the size of a washed-out object is given. As a summary the following is stated: 1) It is not permissible to solve the problem of the admissible enlargement in a primitive way, proceeding only from the magnitude of the resolution, which can vary within wide limits. 2) It is necessary to take into account the structure of the developed picture, which may depend upon many factors. Suggestions are made for the improvement of the structure of the negative. Diagrams, based on reference 9, are given, showing the errors in stereoscopic observations of enlarged aerial photographs. There are 6 figures, 1 table, and 9 references, 8 of which are Soviet.

Card 3/4

On the Enlargement of Aerial Photographs

SOV/6-58-6-7/2

1. Aerial photography
2. Pictures--Processing
3. Measurement--Errors
4. Mathematics

--Card 4/4

MIKHAYLOV, V. Ya.

"On the Improvement of the Photographic Quality of Photographs".

report presented at a Conference of the Chief Engineers and Directors of the
Technical Control of Aerial Surveying Enterprises, Moscow Central Bureau of
Surveying and Cartography, Min. of Interior USSR.
(Geodeziya i kartografiya, 1958, no. 6, 77-78)

Mbr. of the staff of: TsNIIGAik

MIKHAYLOV, V. Ya.

AUTHOR: None Given

SOV/ 6-58-6-21/21

TITLE: Chronicle (Khronika)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 6, pp. 79-80 (USSR)

ABSTRACT: From April 24 - 26, 1958 a Technical Scientific Conference took place at the Moscow Institute of Surveying-, Aerial Photography- and Cartography Engineers (Moskovskiy institut inzhenerov geodezii, aerofotos"yemki i kartografii).

In the section of aerial-surveying the following lectures were held: N. Ya. Bobir, Docent, - "On the Problem of the Determination of Elements of the Internal Orientation of Aerial Cameras With Wide and Superwide Angles". Ye. P. Arzhanov, Assistant, - "Investigation of the Apparatus for the Straightening of the Film by Means of Waves". (Compressed Airomechanical Method by Docent A. I. Shershen'). V. Ya. Mikhaylov, Docent, - "On the Change of the Scale of Aerial Photographs in the Course of Enlarging". L. N. Vasil'yev, Aspirant, - "Stereocompensator With Electric Corrections". P. V. Zakharov, Teacher, - "On the Fineness of Grain of Black and White as Well as Color Negatives of Aerial Photographs". Yu. M.

Card 1/3

Chronicle

SOV/ 6-58-6-21/21

Kuznetsov, Aspirant, - "Elements of the Theory of the New Rapid Shutter".

In the section for surveying and photogrammetric apparatus the following lectures were held: I. G. Sarkin, Professor, - "Physical and Mathematical Theses of the Theorem on the Accuracy of the Apparatus as a Means of Measurements". S. M. Golovin, Docent, - "Accelerating the Production Preparations of New Products and Reducing Their Costs". L. A. Malkin, Docent, - "Apparatus for the Exact Recording of Distances". V. S. Mikhoyechov, Assistant, - "Field Tests With the Light Range Finder CBB-1" (In Moscow in August 1957). V. S. Usov, Assistant, - "On the Investigation of the Errors of the Focusing Devices of Telescopes".

In the section of cartography the following lectures were held: N. M. Volkov, Professor, - "On the Engraving in the Production of the Original Publication Editions". A. V. Naumov, Docent, - "Some Problems of the Household of Cartographic Production". G. A. Ginzburg, Docent, - "On the Interrelation of the Distortions in Cartographic Projections". L. A. Bogomolov, Docent, - "The Topographic Evaluation of Aerial Photographs Taken From Airplanes and Helicopters in

Card 2/3

Chronicle

SOV/ 6-58-6-21/21

the Cartographing of Areas Difficult of Access". A. S. Tolstoukhov, Assistant, - "On the Representation of Reliefs of Plane Areas on Topographic Maps".

1. Cartography
2. Aerial photography
3. Scientific reports

Card 3/3

SOV/6-58-7-4/13

AUTHOR: Mikhaylov, V. Ya., Candidate of Technical Sciences

TITLE: On the Application of a Shadowing Device for Aerial Photographs (O primeneniі otteniteley pri aerofotos"yenke)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 7, pp. 26-28 (USSR)

ABSTRACT: The use of wide-angle lenses in aerial photography offers a number of advantages, the negatives, thus produced, however, are not very uniform. The density considerably decreases from the center towards the edges. If a device shadowing off (ottenitel') the center of the picture and thus equalizing the exposure between the edges and the center is used the developing must not be interrupted prematurely and details at the edges are standing out well. A wide-angle lens cannot be used for color film without a shadowing device. In the course of further progress made in the USSR in the design of lenses the distribution of exposure in the field of view has been improved. Hence the shadowing device was considered to be unnecessary although this step is not justified. 1957 an aerial survey on color film was carried

Card 1/2

SOV/6-58-7-4/19

On the Application of a Shadowing Device for Aerial Photographs

out by the Central Scientific Research Institute of Surveying, Aerial Photography and Cartography with an aerial camera with a "Russar-29" lens. The shadowing device was applied to the lens by evaporating beryllium onto the lens. In the first days of November aerial photographs were made with and without this shadowing device. (fresh snow had already fallen). Prints made from shadowed aerial negatives were much better than those made from negatives produced without shadowing. Also the problem of using interchangeable light filters in aerial surveying lenses has been satisfactorily solved. If these light filters are mounted onto the lenses, the light filter will also serve as a shadowing device. There are 2 figures.

1. Aerial photography
2. Photographic lenses—Performance
3. Photographic lenses—Coating
4. Beryllium—Applications

Card 2/2

AUTHOR: Mikhaylov, V. Ya., Candidate of
Technical Sciences SOV/6-58-8-7/15

TITLE: On the Problem of the Deformation of Aerial Photograph Negatives
(K voprosu o deformatsii aeronegativov)

PERIODICAL: Geodeziya i kartografiya, 1958, Nr 8, pp. 44-46 (USSR)

ABSTRACT: Data are given with respect to the storing of the negatives of
aerial photographs for a period of three years. The following
results were obtained by a comparative test: 1.) In all cases
the lengths of rolls change less than their breadths. 2.) When
the negatives are kept in a cardboard box deformation increases
considerably. 3.) After they were stored in a hermetically closed
case (which contained a vessel with camphor dissolved in butyl
alcohol) deformation decreased rapidly. 4.) In the case of films
which had been treated with a 6% glycerin solution in water be-
fore drying, deformation decreased. 5.) Very little deformation
was found if films were placed on an ordinary and previously
dried base when stored in a camphor- and butyl-alcohol atmosphere.
There are 2 figures, 1 table, and 1 reference, which is
Soviet.

Card 1/2

On the Problem of the Deformation of Aerial
Photograph Negatives

SOV/6-58-8-7/15

1. Aerial photographs 2. Photographic film--Storage 3. Photographic film
--Deformation

Card 2/2

PLANE I BOOK EXPLANATION
SV/131
SV/13-S-1

Moscow. Institut Inzhenerov geodesii, aerofoto'yamki i kartografi
Trudy, vyp. 31 (Transactions of the Moscow Institute of Engineering Geodesy,
Aerial Photography, and Cartography no. 31) Moscow, Geodesists, 1959.
163 p. Karta aliip inserted. 1,000 copies printed.

Editorial Board: A.I. Munkshvili (Resp. Ed.), V.I. Iyevich (Deputy Resp. Ed.),
G.V. Baginskiy, S.I. Belykh, M.M. Volyn, A.I. Durnev, S.V. Teliyev,
P.S. Malinov, A.F. Zakh, A.I. Kodrinskiy, M.D. Solov'yev, S.V. Pavlov, and
P.F. Shukh, Ed. of Publishing House: I.A. Shumakov, Tech. Ed.: V.V. Romanov.

PURPOSE: This collection of articles is intended for specialists in geodesy, car-
topgraphy, and photogrammetry.

COVERAGE: The book is a collection of 20 papers presented at the KUCIUM in
October 1957 and printed in abbreviated form. The reports presented discuss
the current status and the future prospects for development of aerial photog-
raphy, topographic mapping, geodesy and geodetic instruments, photogram-
metry and photointerpretation, cartography and its associated
mathematical and practical problems. No personalities are mentioned. References
are given several of the articles.

Card 1/4

1. <u>Burakov, A.B.</u> 40 Years of Soviet Geodesy and Cartography	5
2. <u>Komarovskiy, G.V.</u> Results and Prospects of the Development of Aerial Photography in the USSR	11
3. <u>Salator, P.S.</u> Basic Problems of Higher Education in Geodesy in the USSR	15
4. <u>Podobedov, B.S.</u> Contemporary Topographic Maps and Methods for Improving Them	23
5. <u>Volichenko, V.A.</u> Prospects of Using Location by Means of Light for the Construction of Geodetic Grids	31
6. <u>Kolupayev, A.P., A.I. Kuznetsov, and A.Y. Masayev.</u> State and Prospects of Development of Geodetic Astronomy	41
7. <u>Saifullin, V.I.</u> Present State and Prospects of Developments of Scientific-Leveling Instruments	49
8. <u>Konshin, M.D.</u> Determining the Elements of External Orientation in Flight	57
9. <u>Budakov, M.M.</u> New Aerial-Photographic Lenses	63
10. <u>Kargopolov, I.B.</u> On the Rectification of Photogrammetric Networks	71
11. <u>Gol'dman, L.M.</u> Problems of Topographic Interpretation of Aerial Photographs	77
12. <u>Mikhaylov, V.N.</u> Effect of the Photographic Properties of Aerial Photographs on Their Interpretability	83
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14. <u>Koldayev, P.I.</u> Ways and Means for Improving Planistic Representation of Relief on Maps	97
15. <u>Zavitskiy, I.P.</u> Cartographic Mapping Agricultural Areas in the USSR	103
16. <u>Bortyukov, M.P.</u> Electronic Cartographic Rectifier	111
17. <u>Perlov, V.N.</u> Plastic Foundations and Non-Silver Photo-sensitive Layers in Cartographic Production	117
18. <u>Merkulov, I.A.</u> Microfilming and the Possibilities of Its Use in Cartography	123
19. <u>Ginsburg, G.A.</u> Investigation of Certain Aspects of the Problem of the Mathematical Basis of Small-Scale Geographic Maps in the Transitions of the TETIGIUM	133
20. <u>Solov'yev, M.D.</u> Perspective Projections with Multiple-Image Per- spectives	137

AVAILABLE: Library of Congress (CS 275.363, no. 31, 1959)

Mikheylov, V.N.

10.11.1959
1.2

PHASE I BOOK EXPLOITATION

SOV/3815
SOV/7-M-7

Akademiya nauk SSSR. Laboratoriya aerometodov

Trudy, tom 7: Materialy VII Vsesoyuznogo mezhdunarodnogo soveshchaniya po aeros"yemke, 25 noyabrya - 1 dekabrya 1956 g. (Transactions of the Laboratory of Aerial Methods, Academy of Sciences USSR, Vol. 7: Materials of the 7th All-Union Interdepartmental Conference on Aerial Surveying) Moscow, 1959. 331 p. 1,400 copies printed.

Editorial Board: A.V. Glagolev, V.G. Zdanovich, N.G. Kell' (Resp. Ed.), D.M. Kudritskiy, K.S. Lyalikov, and G.G. Samoylovich; Ed. of Publishing House: D.M. Kudritskiy; Tech. Ed.: M.Ye. Zindel'.

PURPOSE: This collection of articles is intended for photogrammetrists. The articles will be of interest to all governmental and industrial agencies concerned with aerial photography.

COVERAGE: This is the first volume of a 2-volume work containing reports read at the All-Union Conference on Photogrammetry which took place in Leningrad from November 25 to December 1, 1956, under the auspices of the Laboratory of Aerial Photography Methods of the Academy of Sciences USSR. These reports
Card 1/15

. Transactions of the Laboratory (Cont.)

SOV/3815

describe the principles and applications of photo interpretation in the fields of soil science, forestry, geology, hydrology, industrial development, etc. Individual reports discuss the equipment used and techniques employed. References accompany each article.

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Kell', N.G. Preface	3
Bulanov, A.I. [Glavnoye upravleniye geodezii i kartografii - Main Administration of Geodesy and Cartography]. Organization, Planning, and Execution of Aerial Survey Operations by the Main Administration of Geodesy and Cartography of the Ministry of Internal Affairs, USSR	5
<u>Mikhaylov, V.Ya.</u> [Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aerofotos''yemki i kartografii - Central Scientific-Research Institute of Geodesy, Photogrammetry, and Cartography]. Present State and Future Prospects of the Development of Scientific Programs in Aerial Photography	10

Card 2/15

MIKHAYLOV, Viktor Yakovlevich; MARKHILEVICH, K.I., red.; SHAMAROVA,
T.A., red.isd-va; ROMANOVA, V.V., tekhn.red.

[Aerial photography and general photographic fundamentals]
Aerofotografiia i obshchie osnovy fotografii. Izd.2., perer.
i dop. Moskva, Izd-vo geodes.lit-ry, 1959. 362 p.

(MIRA 13:2)

(Photography, Aerial) (Photography--Textbooks)

MIKHAYLOV, V.Ya.

Present state and immediate prospects for the development of
scientific work in the field of aerial photography. Trudy
Lab.aeromet. 7:10-18 '59. (MIRA 13:1)

1. TSentral'nyy nauchno-issledovatel'skiy institut geodezii,
aerofotos"yemki i kartografii.
(Photography, Aerial)

MIKHAYLOV, V.Ya., kand. tekhn. nauk dots.

Effect of the photographic qualities of aerial photographs on their interpretability. Trudy MIIGAIK no.31:83-85 '59.

(MIRA 13:3)

(Photogrammetric pictures)

MARKHILEVICH, K.I.; SHEBERSTOV, V.I.; KIRILLOV, N.I., prof., doktor
tekhn.nauk; MASLENKOVA, N.G.; KOLOSOV, K.A.; MIKHAYLOV, V.Ya.;
MATIYASEVICH, L.M.; FRIDMAN, I.M.; SPASOKUKOTSKIY, N.S.; KHAZAN,
S.M.; DEYCHMYSTER, M.V.; BLYUMBERG, I.B., dotsent, retsenzent;
LYALIKOV, K.S., prof., doktor khim.nauk, retsenzent; TELESHEV,
A.N., red.; MALEK, Z.N., tekhn.red.

[Present-day developments in photographic processes; processing
of light sensitive materials and new processes for obtaining the
photographic image] Sovremennoe razvitie fotograficheskikh
protsessov; obrabotka svetochuvstvitel'nykh materialov i novye
protsessy polucheniya fotograficheskogo izobrazheniya. Pod red.
N.I.Kirillova. Moskva, Gos.izd-vo "Iskusstvo," 1960. 341 p.
(MIRA 14:4)

1. Leningradskiy institut kinoinzhenerov (for Blyumberg).
(Photographic chemistry)

S/058/62/000/002/014/053
A058/A101

AUTHOR: Mikhaylov, V. Ya.

TITLE: Investigation of aerial-film deformation

PERIODICAL: Referativnyy zhurnal, Fizika, no. 2, 1962, 30-31, abstract 2G224
("Tr. Tsentr. n.-i. in-ta geod. aeros'emki i kartogr.", 1961, no. 142, 97-122)

TEXT: Deformation was investigated of aerial films used for precision photogrammetric works and coated on different bases: nitrate or acetate. Drying off the base prior to coating appreciably reduces initial deformation, but in the course of storage, deformation gradually increases more for nitrate bases than for acetate bases. Initial deformation is about the same for color and black-and-white films but the increase of deformation during storage time is substantially greater for color films. Introducing certain substances into the rinse water reduces deformation: in this connection glycerine (4 - 6%) and urea (2%) are best. For nitrate bases this reduction applies to initial as well as subsequent deformation, whereas for acetate bases the effect on deformation is negligible in the case of storage, especially if urea is used. Increasing the

Card 1/2

Investigation of aerial-film deformation

S/058/62/000/002/014/053
A058/A101

humidity during storage decreases deformation, for which reason a humidity of 70 - 80% can be recommended as being optimum. Contrary to the data in the literature, it was found that deformation decreases on introducing alum into the fixing bath. In view of the obtained data, it is advisable to store film under conditions leading to the least deformation, as well as to change over from nitrate bases to acetate bases.

A. Kartuzhanskiy ✓

[Abstracter's note: Complete translation]

Card 2/2

MIKHAYLOV, V.Ya.; Prinimala uchastiye GUBANKOVA, O.P.

Study of the quality of aerial color negatives. Trudy TSNIIGAIK
no.142:173-197 '61. (MIRA 15:8)
(Aerial photogrammetry) (Color photography—Negatives)

MIKHAYLOV, V.Ya.

Deviation from the standard color developing method and its
effect on the quality of the color image. Usp. nauch. fot. 8:
88-91 '62. (MIRA 17:7)

MIKHAYLOV, V.Ya.

Quality control of aerial photographs. Geod. i kart. no.10:44-47
0 '63. (MIRA 16:12)

MIKHAYLOV, V.Ya.

Symposium on the quality of the photographic image. Zhur. nauch.
i prikl. fot. i kin. 8 no.3:245-247 My-Je '63. (MIRA 16:6)

(Photography--Congresses)

MIKHAYLOV, V.Ya.

Sensitometric evaluation of the quality of black-and-white and color
aerial photographs. Usp.nauch.fot. 10:102-107 '64.

(MIRA 17:10)

MIKHAYLOV, V.Ya.

Structural characteristics of present-day air films and the sharpness of the image on aerial negatives. Trudy TSNIIGAIK no.149:70-92 '64.

Sensitometric parameters of topographic aerial films.

Ibid.:93-101

(MIRA 1963)

L 33240-65 PSF(h)/FSS-2/EWT(1)/EWG(v)/EWA(d)/T/EED(b)-3 Pn-4/Pe-5/Pae-2
 TJP(c) GW
 ACCESSION NR: AT5006394 S/2547/64/000/149/0093/0101

AUTHOR: Mikhaylov, V. Ya.

TITLE: Sensitometric parameters of topographic aerial films

43
 B+1

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros
 "yemki i kartografii. Trudy, no. 149, 1964. Issledovaniya po aerofotografii (Re-
 search on aerophotography), 93-101

TOPIC TAGS: ¹² aerial film, ²⁰ aerial photography, sensitometry, sensitometric parameter,
 contrast, fog, picture density, integral density, topographic film

ABSTRACT: While, in other branches of applied photography, one can often smooth
 out photographic details artificially, aerial-geodesic photography strives
 for the maximum sharpness of even the smallest objects in the picture. A satis-
 factory set of sensitometric parameters seemed to be: a) the coefficient of con-
 trast; b) the optical density of the fog; c) the minimum density of the picture;
 d) the excess of the minimum density above the fog; e) the integral density of
 the negative; and f) the maximum density of the negative. For the determination
 of these quantities the personnel of the T²NIIGA¹K constructed a set of field
 Sensitometricheskiye

~~sensitometric devices described earlier (A. N. Uspenskiy, Sensitometricheskiye~~
Card 1/2

L 33240-65

ACCESSION NR: AT5006394

pribery TsNIIGA1K, Trudy TsNIIGA1K, 1961, no. 142). The present article summarizes
the results of measurements accumulated during the 1961-1962 period. The results
show the necessity for an urgent introduction of field sensitometry. The author
shows the necessity for the above-mentioned

also recommends certain standardized upper and lower limits for the above
sensitometric parameters. Orig. art. has: 1 figure and 5 tables.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut geodezii aeros"yem-
ki i kartografii, Moscow (Central geodesics, aercphotography and cartography
scientific research institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 007

OTHER: 000

Card 2/2

L 33241-65 FSF(h)/FSS-2/EWT(1)/EWG(v)/EWA(d)/T/EDD(b)-3 Pn-4/Pe-5/Pae-2
TJP(c) GW

ACCESSION NR: AT5006393

S/2547/64/000/149/0070/0092

43

AUTHOR: Mikhaylov, V. Ya.

40

B+1

TITLE: Structural characteristics of modern aerial films and the image sharpness on aerial negatives

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros "yemki i kartografii. Trudy, no. 149, 1964. Issledovaniya po aerofotografii (Research on aerophotography), 70-92

TOPIC TAGS: aerial photography, aerial photographic film, film sensitivity, film structure, grain size, shutter speed, image sharpness

ABSTRACT: The following panchromatic films were investigated: 1) aerial panchromatic film type 10; 2) a new type of aerial film differing from type 10 by optical sensitization; 3) a small-grain high-sensitivity film; 4) a small-grain film

determined their sharpness using the boundary line and the diffractometric methods,

Card 1/2

L. 33241-65

ACCESSION NR: AT5006393

3

and studied the properties of some actual aerial photographs. Since aerial cameras do not utilize fast shutters, the author recommends a stepping-down of the objective to a ratio of 1:11 in the case of excess light; he also advocates the introduction of central shutters permitting exposures of 0.001 sec. and less, and recommends increases in light sensitivity of small-grain thin films. Aerial photographic films should contain halo protection, and further studies are necessary to detect all the factors adversely affecting the quality of aerial photographs. The author thanks T. A. Kulakova and N. M. Belyayeva for carrying out the ex-

perimental part of the investigation." Orig. art. has: 5 formulas, 8 figures and 10 tables.

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut geodezii aeros"yem-ki i kartografii, Moscow (Central geodesics, aerophotography and cartography scientific research institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 009

OTHER: 004

Card 2/2

MIKHAYLOV, V.Ia., assistant

Pathomorphology of cancer of the body and tail of the pancreas.
Trudy OMI no.54:131-149 '64.

Islet cell cancer of the pancreas. Ibid.:151-168

(MIFA 1810)
1. Iz kafedry patologicheskoy anatomii (zav. zapluzhennyy doktorel'
nauki prof. I.S. Novitskiy) Onkologicheskogo instituta.

MIKHAYLOV, V.Ya.

Association of opisthorchosis and cancer of the pancreas. Med.
paraz.i paraz.bol. 33 no.4:422-423 J1-Ag '64.

(MIRA 18:3)

1. Kafedra patologicheskoy anatomii Omskogo meditsinskogo instituta
imeni Kalinina.

MIKHAYLOV, V.Ya.

Determining the exposition in aerial photography. Geod. i Kart.
no.3:38-41 Mr '64. (MIRA 17:9)

MIKHAYLOV, Ya.

**For new settlers of virgin lands. Znan.sila no.8:26 Ag'55.
(Building materials) (MLRA 8:11)**

MIKHAYLOV, Ya.

Combine extracts salt. Znan.sila 30 no.11:17 N '55. (MLRA 9:1)
(Baskunchak lake--Salt mines and mining)

MIKHAYLOV, Ya.

~~-----~~
Vibrating mill. Nauka i shizn' 23 no.1:51 Ja '56. (MLBA 9:4)
(Crushing machinery)

MIKHAYLOV, Ya.

Remote dynamograph. Nauka i zhizn' 23 no.6:50 Je '56.

(MLRA 9:9)

(Oil well drilling--Equipment and supplies)

MIKHAYLOV, Ya.

USSR/Biology, Agricultural - Toxic Chemicals Apr 52

"Apparatus for Combined Spraying and Dusting," Ya. Mikhaylov

"Nauka i Zhizn'" No 4, p 28

2 F.Ya.Pushchin, Sr Sci Assoc, All-Union Inst of Plant Protection, and V.A.Fedorov and Z.S.Nasonovskaya, Sci Associates, All-Union Inst of Agr Mach Bldg, developed an app mounted on a motor truck which permits either spraying or dusting, or simultaneous spraying and dusting of large areas. Water may be sprayed while a solid poison is dusted, so that adhesion of the powder to plants is improved. The inventors received a Stalin prize in 1951.

221T3

MIKHAYLOV, Ya.

~~Summer at the end of March. Vokrug sveta no.8:33 Ag '53.~~ (MLBA 6:7)
(Crops and climate) (Vegetable gardening)

MIKHAYLOV, Ya.

Potatoes grown in peat. Vokrug sveta no.2:13 Mr '54. (MLRA 7:2)
(Potatoes)

MIKHAILOV, Ya.

USSR/Agriculture

Card 1/1

Author : Mikhailov, Ya
Title : Charging with moisture
Periodical : Nauka i Zhizn' 21/3, 32 and insert, Mar/1954
Abstract : Irrigation is carried on in the Southeast of European Russia, Central Asia, and Transcaucasia for raising grain, cotton and beets. An analysis of the proper times for irrigating throughout the year is given. Two graphs.
Institution :
Submitted :

MIKHAILOV, YA.

USSR/Agriculture - Moisture Conservation

Card 1/1

Author : Mikhailov, Ya.

Title : Intensive cultivation

Periodical : Nauka i Zhizn' 21/4, 28, April 1954

Abstract : The Trans-Volga steppes become very green after the snow melts and then dry out, yielding very poor pasture. A scheme to conserve moisture and improve the grazing areas consisting of sowing sunflower seed with oats and Sudan grass is presented.

Institution :

Submitted :

MIKHAYLOV, Ya.

"Periodin." Nauka i zhizn' 22 no.7:55 J1 '55. (MLRA 8:9)
(Agricultural chemistry)

Михайлов, Я.

MIKHAYLOV, Ya.

~~Решение~~
Rain by order. Znan.sila 30 no.7:12 J1'55. (MIRA 8:10)
(Irrigation)

MIKHAYLOV, Ya.

~~Radioactive fertilizers. Nauka i shizn' 23 no.2:46-47 F '56.~~

Radioactive fertilizers. Nauka i shizn' 23 no.2:46-47 F '56.

(MLRA 9:5)

(Plants, Effect of radioactivity on) (Fertilizers and manures)

MIKHAYLOV, Ya.

Automatic apparatus for controlling water. Nauka i shizn' 23 no.3:
48-49 Apr '56. (MLRA 9:7)
(Water, Underground) (Petroleum engineering)

MIKHAYLOV, Ya.

Furrow system of irrigation. Nauka i zhizn' 23 no.10:51 0 '56.
(MLBA 9:11)

(Irrigation)

MIKHAYLOV, Ya. Ye.; NABOYCHENKO, K. V.; ASTASHENKOV, N. N.; KIRYUTIN, A. A.

"Investigation into critical heat fluxes in a channel of annular cross-section with forced motion of acetone subcooled below the saturation temperature."

~~Max~~

paper submitted for 2nd All-Union Conf on Heat and Mass Transfer, Minsk, 4-12 May 1964.

Moscow Engineering & Physical Inst.

MIKHAYLOV, Ya.

Sturgeons

Fresh-water hybrids; Naula i zhizn' 19 no. 3, 1952.

Monthly List of Russian Accessions, Library of Congress, May 1952. UNCLASSIFIED.

MIKHAYLOV, Ya.

Sturgeons

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KOROBOCHKIN, I.V., kand. tekhn. nauk; BEL'SKIY, B.R., inzh.; MIKHAYLOV, Ye.A., inzh.; GUTENMAKHER, L.I., laureat Stalinskoy premii doktor tekhn. nauk, nauchnyy red.; SEVOST'YANOVA, M.V., doktor fiz.-mat. nauk, prof., nauchnyy red.; RUSEVICH, I.M., inzh., red.; OSTROVSKAYA, Ye.G., otv. za vypusk

[Catalog-manual of laboratory devices and equipment] Katalog-spravochnik laboratornykh priborov i oborudovaniia. Moskva, Mashgiz. No.21. [Calculating machines and devices] Schetno-vychislitel'nye pribory i apparaty. 1948. 22 p. No.27. [Microscopes and lenses] Mikroskopy i lupy. 1950. 87 p. (MIRA 16:4)

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Dissertation: Increasing the accuracy of computers by adjustment

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PHASE I BOOK EXPLOITATION SOV/1610

Mikhaylov, Yevgeniy Arkad'yevich

O povyshenii tochnosti schetno-reshayushchikh priborov
metodom regulirovki. (Increasing the Precision of Computers
by the Adjustment Method) Moscow, Oborongiz, 1958. 107 p.
4,850 copies printed.

Ed.: S.I. Bumshteyn, Engineer; Ed. of Publishing House:
N.A. Gortsuyeva; Tech. Ed.: V.P. Rozhin; Managing Ed.:
A.S. Zaymovskaya, Engineer.

PURPOSE: The book is intended for designers of instruments
and for scientific workers studying the precision of me-
chanisms.

COVERAGE: The book shows the position and the role of adjustment
among the other methods of obtaining the required accuracy
in the mechanisms of precise instruments. Formulas and
tables are given for the calculation of accuracy, taking

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Increasing the Precision of Computers (Cont.) SOV/1610

adjustment into account. Various adjustment methods of gears, cams and camoidal mechanisms are studied. Experimental data obtained under conditions of serial production of instruments are compared with calculated results. In connection with adjustment theory, Soviet personalities mentioned include Academician N.G. Bruyevich, Professor N.A. Borodachev, M.L. Bykhovskiy, and Yu. V. Lyubotov. There are 39 Soviet references.

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MIKHAYLOV, Ye. A.

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Akademiya nauk SSSR. Institut mashinovedeniya

Voprosy sinteza i tochnosti slozhnykh ustroystv nepreryvnogo deystviya (Synthesis and Accuracy of Complex Mechanisms for Continuous Operation) Moscow, Izd-vo AN SSSR, 1958. 226 p. 3,500 copies printed.

Resp. Ed.: Bruyevich, N.G., Academician; Ed. of Publishing House: Ioffe, D.M.; Tech. Ed.: Golubeva, V.

PURPOSE: The book is intended for scientific research workers and engineers concerned with computers.

COVERAGE: This book is a collection of articles divided into two parts. The three articles of the first part deal with the synthesis and accuracy of complex mechanisms for computers, functional investigation, inputs and outputs, methods of synthesis in solving implicit functions and accuracy of the process of manufacturing parts. The second part of the book

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Synthesis and Accuracy (Cont.)

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contains seven articles dealing with the accuracy of some particularly simple mechanisms: cranks, gears, etc., and their design for accuracy. The articles are based on experimental material which shows that the theoretical premises and conclusions were confirmed by practical tests. The book is based on scientific work carried out by the authors in 1955-56. The authors thank the following for reviewing the book: N.Ye. Kobrinskiy, N.I. Pchel'nikov, and A.A. Feldbaum, Professors and Doctors of Technical Sciences; B.G. Dostupov, Docent, Doctor of Technical Sciences; T.A. Golin'evich, A.I. Ivantsov, Yu.V. Lybatov, and I.P. Seregin, Docents, Candidates of Technical Sciences; B.M. Tseytlin, Candidate of Technical Sciences. The author also thanks Professor, Doctor of Technical Sciences G.G. Baranov for assistance on problems of simple mechanisms, and N.P. Ivanov for working on the second part of the book. There are 87 references, all Soviet.

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Foreword

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